

Lab 1. CyberCIEGE Introduction

CyberCIEGE is an information assurance (IA) training tool that illustrates computer and network security principles through simulation and resource management trade-offs. CyberCIEGE players construct computer networks and make choices affecting the ability of these networks and the virtual users to protect valuable assets from attack by both vandals and well-motivated professionals.

The CyberCIEGE “Introduction” scenario is a simple scenario that is intended to provide new players with an introduction to CyberCIEGE, including several of the game interfaces and features. Players will purchase computers and connect them to networks. Players will also train their users, configure user workstations and establish physical security.

As with all CyberCIEGE scenarios, students are encouraged to explore the effects of “wrong” choices as well as trying to select the correct choices. Plan on playing the scenario several times before finally going through it making what you believe are the correct choices.

This scenario explores the following CyberCIEGE concepts:

- Purchasing workstations and placing them on user’s desks
- Connecting workstations to an existing LAN
- Hiring support staff to help manage the information technology resources
- Establishing simple procedural settings to manage user behavior (e.g., beware of email attachments)
- Buy user training so that they better understand the procedural policies
- Set physical zone security to protect against equipment theft.
- Configure workstations to automatically logoff after a period of inactivity.

1.1 Preparation

The game is installed in the 3600 lab and is available from the workstations.

From the CyberCIEGE folder on the desktop, open the “Starting Scenarios” icon. This will start the “Campaign Player” seen in figure 1.



Figure 1: Read the Campaign Description and Click Play

Read the campaign description. Then click the “Play” button.



1.2 Play

As you play the scenario, you can save your game state at any time via the GAME screen. Also, the scenario will automatically save the state as you transition to each new phase. These saved games become available in the Campaign Player “Saved Game List”.

1.2.1 Fly Around and Explore the Office

- Click the OK button in the initial briefing.
- Press the “k” key to view keyboard shortcuts
- Pan around the office. Zoom in and zoom out.
- Press “u” to toggle between users. Note how they can’t currently achieve their goals. Clicking on a user also selects that user and highlights the user’s current thoughts.
- Press the “Tab” key several times to iterate through a series of birds-eye views. This will help when you buy computers and need to place them on desks.
- When you are done exploring, press the Tab key until you have a good view of Curly’s office.

1.2.2 Buy Workstations and Establish Initial Network

- Follow the pop-up help to read your objectives for the first phase of the scenario. There will be four phases to complete.
- Follow the pop-up help instructions to buy them each workstations. Note that in CyberCIEGE, you are encouraged to set up and configure your networks before you press the play button.  If and when you do press the play button, you can pause the game by pressing the pause button. 
- Follow the pop-up help to connect the workstations to the LAN.
- Follow the pop-up help to hire an IT support staff member.
- The scenario should then advance to the second phase.

1.2.3 Establish Procedural Security and User Training

- Check your new objectives.
- Before you make procedural settings, press the play button and watch what happens.
- Follow the pop-up help to establish procedural security for Moe and Curly
- Follow the pop-up help to buy them training.
- The scenario should then advance to the third phase

1.2.4 Establish Physical Security and Some Individual Accountability

- Let the game run, and ignore the warnings for now.
- A computer will be stolen
- Quit the game. Don’t worry, you’ll get right back to where you were.

- You now see the player again as per figure 1. However now there should be two new entries in the “Saved Games” list. Select “Phase2” and click “play”
- You are now back to where you were before your computer was stolen.
- Enhance physical security per the pop-up help.
- Restart the simulation with the play button
- Follow the pop-up help to force their workstations to automatically log off after a period of inactivity.
- Eventually the game will end and you’ll be taken to a “debrief” window.

1.3 Clean Up

Exit the scenario by clicking the “Quit” button in the GAME screen.

Note you have saved versions of the game from each completed phase. You can select and restart from any of them. Also, during the game you can select “Save” from the Game tab and save the current state for future play.

1.4 Play CyberCIEGE Outside the Lab

CyberCIEGE is also available to be played from workstations on the NPS domain. It is on a shared server and can be accessed as follows from any PC on the domain:

- login to the domain as yourself
- Map a drive to: \\kiska\Groups2\$\CyberCIEGE
 - Right click on MyComputer
 - Select "Map Network Drive"
 - select the drive name (something like "u:" will not conflict with other mappings)
 - In the "Folder" field, enter: [\\kiska\Groups2\\$\CyberCIEGE](\\kiska\Groups2$\CyberCIEGE)

Finally, CyberCIEGE is available on CD for installation on home computers and laptops. See <http://cissr.nps.edu/cyberciege/updates> for system requirements and updates.

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